



Mobile IPv4 DHCP Configuration Extension

Kent Leung, George Tsirtsis

MIP4 Working Group – IETF 75

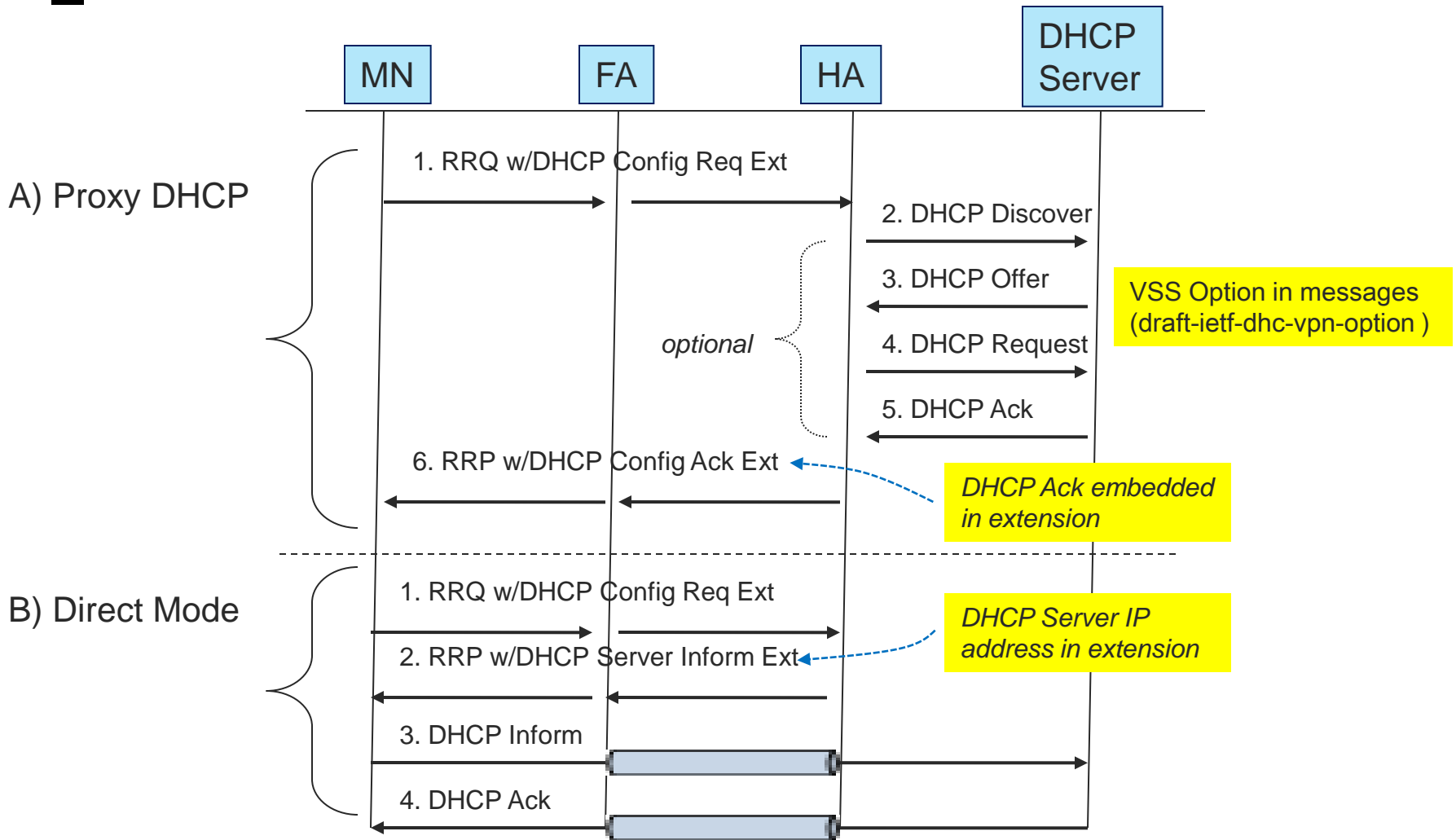
Stockholm, Sweden

July 27, 2009

Overview

- MN obtains host configuration via DHCP options with Mobile IP assistance
- Configuration parameters from home domain only
- MN has DHCP client function or capable of processing DHCP Ack message
- VPN domain (VRF) consideration for DHCP server location via DHCP Virtual Subnet Selection (VSS) Option
- Proxy Mobile IPv4 integration – DHCP Ack includes the obtained DHCP options

Call Flows



[Extensions]

- DHCP Configuration Request Ext
- DHCP Configuration Ack Ext
- DHCP Server Inform Ext

[Summary]

- Configuration info from the
 - Con - visited domain
 - Pro + home domain
- Pro + Signaling efficiency
- Pro + Built-in authentication of the configuration,
- Pro + Extensible parameters
- Con - Support for non-DHCP capable MN
- Pro + Filter DHCP message into home domain
- Pro + Avoid IP address management conflict between MIP and DHCP
- Pro + Avoid use of broadcast

draft-ietf-mip4-gen-ext

Proxy DHCP and Direct Mode

Proxy DHCP

Proxy DHCP

Proxy DHCP and Direct Mode

draft-ietf-mip4-gen-ext

Proxy DHCP

Proxy DHCP and Direct Mode

Proxy DHCP and Direct Mode

Legend: Pro - + Con - -